

# WHAT TO LOOK FOR IN THE SELECTION OF LASER CUTTING EQUIPMENT TRANSMISSION SYSTEM

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## REDSAIL CM1390E LASER ENGRAVING/CUTTING MACHINE

2-Way Pass-Through  
Professional Laser Machine Manufacturer

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The transmission system is essential for a laser device, and different types of transmission systems have varying degrees of influence on the stable operation and efficiency improvement of the [laser cutting machine](#). Specifically, what are the transmission systems of the laser cutting machine? How should we choose?

The transmission system can be divided into:

1. Roller screw, 2. Rack and pinion, these two are the most commonly used transmission methods. Comparing its work efficiency and work precision, each has its own merits.  
Specifically:
2. Operating efficiency The transmission efficiency of the roller screw should be prioritized with that of the rack and pinion.
3. Working accuracy The gear rack is higher than the roller screw
4. Stability The teeth of the helical cylindrical gear are a gradual meshing process, and the force on the gear teeth is also gradually from small to large, and then from large to small, so the meshing of the helical gear is relatively stable, and the impact and noise are small. Suitable for high-speed, high-power transmission.

High transmission efficiency, stable movement, long working life, high positioning accuracy and repeat positioning accuracy, good synchronization, high reliability, no self-locking, complex manufacturing process. The above factors are necessary considerations when choosing a transmission system, and each enterprise can consider and choose according to its actual situation.